

**Protective Mechanisms against Infections:**

1-Vaginal Acidity: due to lactobacilli under the effect of estrogen

\*So when there is low estrogen infections may occur, e.g. pre-pubertal & postmenopausal

2-Mucus plug of the cervix during pregnancy

3-Strong stratified squamous epithelium of vagina & cervix

4-Position of labia that cover the other parts of the vulva

5-Monthly Shedding of the uterine endometrium

**Trichomoniasis**

**Epidemiology:**

-CO: Trichomonas vaginalis (flagellated protozoan) -It is a **sexually transmitted infection**

**C/P:**

-Asymptomatic in 10 - 15 % of cases      **-Vaginal discharge: Frothy, Greenish and Offensive**

-Vulval itching & Soreness      -Dysuria      -Cervix may have strawberry appearance

**Diagnosis:** -Wet smear -Culture

**Complications:** -may enhance HIV transmission

**Implications in pregnancy:**

-Associated with: **-PTD (Preterm delivery)**    **-LBW (Low birth weight)**

-May be acquired **perinatally** is 5% of babies born to infected mothers

**Treatment:**

-**Metronidazole** 2 gm orally in a single dose (or Metronidazole 400 mg daily for 5 – 7 days)

-Contact tracing & treatment of partner    -Avoid Intercourse during course of treatment

**Candidiasis**

**Epidemiology:**

-CO: Candida Albicans (Yeast like fungus) -It is **NOT** a sexually transmitted disease

-70% of women will experience it at a certain point of their life

-20 – 40 % of women are **chronic carriers**

**Predisposing Factors:**

-Antibiotics    -Pregnancy    -High dose of COCP (combined oral contraceptive pills)    -DM    -Anemia

**C/P:** -Asymptomatic    -Vulval Itching & Soreness    -Dysuria    -Superficial Dyspareunia

**-Vaginal Discharge: Thick, White and Curd-like**

**Diagnosis:**

-Characteristic appearance of:

▪Vulval & vaginal erythema    ▪Vulval fissuring    ▪Typical white plaques adherent to vaginal wall

-Culture    -Wet Smear → Hyphae and Pseudo-spores

**Implications in pregnancy:**

-Very common with **no** apparent adverse effects

-**Topical imidazoles** aren't systematically absorbed → **safe** for all gestational ages

### **Treatment:**

-Treated only if Symptomatic

-Simple measures may help to decrease recurrence:

1-Cotton underwear 2-Avoid chemical irritation e.g. Soaps 3-Wiping vulva from front to back

\*\*\*Vaginal Douches are **OBSOLETE**: -Wetting → ↑Candida growth -↑Ascending infections -Carcinogenic

-Imidazole derivaives:

▪Local: Pessaries or Cream ▪Systematic: for Virgins & Severe recurrent cases

### **Bacterial Vaginosis:**

#### **Epidemiology:**

-It is caused by overgrowth of mixed anaerobes including (**Gardnerella & Mycoplasma Hominis**) which replace the normally dominated vaginal lactobacilli

-It is **NOT** a sexually transmitted infection

-More common with: ▪Termination of pregnancy ▪IUCD ▪PID

#### **C/P:**

-Asymptomatic -**Vaginal Discharge: Profuse, Whitish grey and Offensive**

-Characteristic **fishy smell after intercourse** (due to the reaction of bacteria with the alkaline semen)

#### **Diagnosis:**

-Vaginal pH > 5.5 (Normally 3.8 - 4.5)

-**Whiff test** (Several drops of a KOH added to a sample of vaginal discharge → Strong fishy odor)

-**Clue cells** in microscopic examination

**Complications:** -Associated with ↑ risk of pelvic infection after gynecological surgery

#### **Implications in pregnancy:**

-Associated with ↑ risk of: -Second trimester miscarriage -PPROM -PTD

\*\*PROM x PPRM

-PROM: Prelabor rupture of membranes = ROM beyond 37 wks

-PPROM: Preterm Premature rupture of membranes = ROM prior to 37 wks

#### **Treatment:**

-Metronidazole 400 mg orally for 5 days or 2 gm orally single dose

-Clindamycin 2% cream vaginally at night for 7 days

